

The successful real-world application of the project's outcomes could also enable the promotion of a culture of adherence within the community.

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### Identifying the potential inappropriate prescriptions in community-dwelling older patients by using GheOP<sup>3</sup>S tool

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**Background:** Older adults tend to have more than one chronic disease and polypharmacy, which can be resulted in inappropriate prescriptions.

**Purpose:** The objective was to identify potential inappropriate prescriptions through a medication review for community-dwelling older adults.

**Methods:** This study was conducted prospectively in community pharmacies between 1 February and 30 June 2024. The study included patients who came to the community pharmacy for any reason, used at least one medication regularly, were over 65 years of age, and provided consent. The medication review was performed using the Ghent Older People's Prescriptions Community Pharmacy Screening (GheOP<sup>3</sup>S version 2) tool (1). The GheOP<sup>3</sup>S tool consists of 5 sections (potentially inappropriate medication, potentially inappropriate medication dependent on comorbidities, potentially omitted medication, drug-drug interactions especially relevant in older people, pharmaceutical care-related criteria to be addressed in the community pharmacy) and 64 criteria, in total.

**Findings:** The study included 100 patients, 55% of whom were female. The mean age of the patients were 70.6 ( $\pm$  4.9) years. The most prevalent chronic diseases were hypertension (n=55), type 2 diabetes mellitus (n=43) and hypercholesterolemia (n=32). Polypharmacy (use of five or more medications) was identified in 64% of patients, with a mean of 5.2 ( $\pm$  2.2) medications per patient. A total of 345 issues could be resulted in potential inappropriate prescriptions were detected in 89 patients. It was found that 76 (22%) of these issues were caused by potential inappropriate medication use, 76 (22%) by potentially omitted medication and 70 (20%) by drug-drug interaction. The remaining 123 (36%) were from the category of pharmaceutical care-related criteria to be addressed in the community pharmacy. Regardless of the categories, the most prevalent issue across all GheOP<sup>3</sup>S criteria was the use of vasodilator drugs (n=48). The other common issues were the lack of annual influenza vaccination (n=38), and the use of combination of medications that increase the risk of falls (n=37).

**Conclusion:** In this study, the frequency of polypharmacy and potentially inappropriate prescribing was found to be high in community dwelling older patients. The community pharmacist-led interventions could be used to prevent, identify, and solve potential inappropriate prescribing in older adults.

#### References:

Foubert K, Capiou A, Mehuys E, et al. Ghent Older People's Prescriptions Community Pharmacy Screening (GheOP<sup>3</sup>S)-Tool Version 2: Update of a Tool to Detect Drug-Related Problems in Older People in Primary Care. *Drugs Aging*. 2021 Jun;38(6):523-533. <https://doi.org/10.1007/s40266-021-00862-6>.

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### Shaping tomorrow's pharmacists: A scoping review on future skills and educational strategies

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**Background:** According to the WHO [1], global challenges in healthcare systems require a redefinition of health care teams, a broader perspective on competencies as well as an expansion of the professional roles of pharmacists [2]. Whilst clinical competencies remain crucial, recent societal and technological developments, including AI, underscore the importance of transversal

competencies –alternatively determined as future or 21st century skills [3,4]. A variety of future skills frameworks exist that originate, for instance, from a labor market (e.g. Future of Jobs Report, World Economic Forum [5]) or education policy perspective (e.g. OECD Learning Compass [6]) including problem-solving competence to deal with new challenges in healthcare or collaboration competence to work in increasingly interdisciplinary teams. Beyond, self-directed learning competence is essential to adapt to changing work requirements and take on new roles. Future skills research indicates that acquisition and development of future competencies require modern teaching techniques.

To date, no future skills approach has been developed specifically for pharmacists, but studies identifying the most important future skills for pharmacists are available as well as studies that emphasize the role of curricula development and modern teaching techniques in undergraduate pharmacy education.

**Purpose:** We aim to synthesize the existing literature on future competencies that pharmacists will need to maintain and efficiently expand their professional roles in healthcare. Additionally, we will explore initiatives on educational curriculum development and associated teaching methods suitable for pharmacists.

**Methods:** A scoping review will summarize data of two literature reviews: (1) to identify the most relevant competencies required for pharmacists for new roles and responsibilities in healthcare. The competencies will include future skills typically included in future skills frameworks and exclude professional competencies related to clinical and pharmacological knowledge. (2) to review existing initiatives in undergraduate pharmacy curricula aimed at enhancing these competencies. The scoping review will be conducted in relevant databases (PubMed, Scopus, ERIC, WoS) and in pharmaceutical journals (members of the Granada statement).

**Findings:** During the preliminary search, for instance the following competencies were identified: leadership, problem solving, design thinking, (digital and intercultural) communication, (interdisciplinary) collaboration, self-directed learning or data literacy.

The scoping review will be conducted in December 2024-January 2025

**Conclusion:** This scoping review provides an overview of future competencies beyond professional skills required for pharmacists to adopt new roles in healthcare. Approaches for curriculum development and teaching methods in pharmacy with regard to single or a broader set of future skills will be summarised.

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### A global outlook of pharmacist independent prescribing in community pharmacy: A scoping review

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**Background:** Pharmacist prescribing has expanded in recent years, with independent prescribing gaining notoriety. Pharmacist independent prescribing services are being implemented as a strategy to alleviate the increasing pressure on overstretched health systems worldwide. Two models are identified: standard of care prescribing, where pharmacists can prescribe for any condition within their competence, and government protocols prescribing, limiting prescribing to specific conditions and medications outlined in official protocols. Considering the heterogeneity across countries, it is crucial to explore and understand the diverse models to inform future policies and practices.

**Purpose:** To identify countries and territories where pharmacists prescribe independently in community pharmacy and summarise their prescribing models.

**Method:** Literature on prescriptive authority of pharmacist independent prescribers was included. And literature describing dependent prescribing models, non-community pharmacy settings, opinions, economic or clinical outcomes on pharmacists prescribing was excluded. Five databases were used for the search: Scopus, Web of Science, CINAHL, PubMed, and Cochrane, along with the Google search engine for grey literature.

**Findings:** The following countries were identified: United Kingdom, Canada, United States, Australia, Poland, Switzerland, Denmark, and France. In the